Session will begin at 3:00 pm

SUMMER SESSION
Closed Question Forums By State
State-specific registration links and information will be announced.

More information to come.
Justice-Involved Individuals with Substance Use Disorders

Judicial and Medical Partnership
Judicial Webinar Series

Session will begin at 3:00 pm

NOTE:
- Audio is muted, and the camera is disabled for attendees.
- Chat room allows you to chat with Panelist for technical issues only.
- Q&A is open and allows for upvoting.
- The series will be recorded for later viewing.

Sponsored by:
New England Regional Judicial Opioid Initiative and Opioid Response Network

Funding for this initiative was made possible (in part) by grant no. 6H79T1080816 from SAMHSA and grant no. 2018-AR-BX-K099 from BJA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services, nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S Government.
Thursday, May 27, 2021 / 3-5p EDT

Welcome
Chief Justice Kimberly Budd, MA

Evidence-Based Treatment Interventions
Dr. John Brooklyn, University of Vermont Medical Center, VT

Judicial Perspective:
Practical Application for Judges
Judge Mark E. Howard, NH

Recovery Processes:
Is Recovery Abstinence?
Dr. John Kelly, Harvard School of Medicine, MA

Judicial Perspective:
Practical Application for Judges
Chief Justice Tina Nadeau, NH

Closing Remarks
Chief Justice Gordon MacDonald, NH
Evidence Based Treatment Interventions

Pharmacotherapy of Opioid Use Disorders

Dr. John Brooklyn
Associate Clinical Director of Family Medicine and Psychiatry
University of Vermont
May 27, 2021
Working with communities to address the opioid crisis.

✧ SAMHSA’s State Targeted Response Technical Assistance (STR-TA) and State Opioid Response Technical Assistance (SOR-TA) grants created the Opioid Response Network to assist states, individuals and other organizations by providing the resources and technical assistance they need locally to address the opioid crisis.

✧ Technical assistance is available to support the evidence-based prevention, treatment, and recovery of opioid use disorders.

Funding for this initiative was made possible (in part) by grant nos. 6H79TI080816 and 1H79TI083343 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.
Working with communities to address the opioid crisis.

- The Opioid Response Network (ORN) provides local, experienced consultants in prevention, treatment and recovery to communities and organizations to help address this opioid crisis.

- The ORN accepts requests for education and training.

- Each state/territory has a designated team, led by a regional Technology Transfer Specialist (TTS), who is an expert in implementing evidence-based practices.
Contact the Opioid Response Network

✧ To ask questions or submit a request for technical assistance:

• Visit www.OpioidResponseNetwork.org
• Email orn@aaap.org
• Call 401-270-5900
Physical Dependence vs. Use Disorder

✧ Dependence-physiological state
  - Tolerance (need more for same effect)
  - Withdrawal (sick when no more drug)

  - Occurs with alcohol, cannabis, opioids, benzodiazepines, nicotine

  - Does NOT occur with cocaine, amphetamines
Substance USE Disorder (SUD)

- Compulsive use despite consequences
  - Brain disorder due to mismatched reward mechanism
The diagram illustrates the process of endorphin and opiate receptor interaction with dopamine. The uptake pump is shown moving dopamine molecules, which bind to the dopamine receptor. This interaction is crucial in the body's reward and pain regulation systems.
Empowering language

- Urine drug screen (UDS) pos or neg for targeted substances
- MUDDY sample
Risk factors

- Biological predisposition toward SUD (Family history)
- Genetics
- Psychological - depression and/or trauma/victimization
- Adverse Childhood events
- Social - family, friends, peers
Critical RISK Factors

✧ Onset of use before age 15
✧ Daily or weekly use of one drug
✧ Poly-drug use

“Youth who make it through the early teen years without substance use decrease the likelihood of developing the DISORDER by 4 times”

--McClellan, Lewis JAMA 2000 PLNDP
Treatment
Impact of Short-Acting Heroin As Used on a Chronic Basis in Humans

Modified from Dole, Nyswander and Kreek, 1966
Opioid Detoxification Efficacy

- Extremely high relapse rates ~90%. Sometimes the same day after leaving facility
- High risk for HIV, Overdose upon relapse
- Abstinence based approach is not the treatment for Opioid dependence
Opioid Agonist Treatment (OAT)

- The recommended treatment for Opioid dependence

- Best outcomes, treatment retention and lowest rates of return to use
From: Comparative Effectiveness of Different Treatment Pathways for Opioid Use Disorder
From: Comparative Effectiveness of Different Treatment Pathways for Opioid Use Disorder
Table 2. Adjusted Hazard Ratios for Overdose and Serious Opioid-Related Acute Care Use by Initial Treatment Group Compared With No Treatment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Adjusted Hazard Ratio (95% CI)</th>
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<tbody>
<tr>
<td></td>
<td>3 Months</td>
</tr>
<tr>
<td>Overdose</td>
<td></td>
</tr>
<tr>
<td>No treatment</td>
<td>1 [Reference]</td>
</tr>
<tr>
<td>Inpatient detoxification or residential services</td>
<td>0.82 (0.57-1.19)</td>
</tr>
<tr>
<td>BH IOP</td>
<td>0.81 (0.50-1.32)</td>
</tr>
<tr>
<td>MOUD treatment with buprenorphine or methadone</td>
<td>0.24 (0.14-0.41)</td>
</tr>
<tr>
<td>MOUD treatment with naltrexone</td>
<td>0.59 (0.29-1.20)</td>
</tr>
<tr>
<td>BH other</td>
<td>0.92 (0.67-1.27)</td>
</tr>
<tr>
<td>ED or inpatient stay</td>
<td></td>
</tr>
<tr>
<td>No treatment</td>
<td>1 [Reference]</td>
</tr>
<tr>
<td>Inpatient detoxification or residential services</td>
<td>1.05 (0.76-1.45)</td>
</tr>
<tr>
<td>BH IOP</td>
<td>0.84 (0.54-1.30)</td>
</tr>
<tr>
<td>MOUD treatment with buprenorphine or methadone</td>
<td>0.68 (0.47-0.99)</td>
</tr>
<tr>
<td>MOUD treatment with naltrexone</td>
<td>1.15 (0.69-1.92)</td>
</tr>
<tr>
<td>BH other</td>
<td>0.59 (0.44-0.80)</td>
</tr>
</tbody>
</table>

Abbreviations: BH IOP, intensive behavioral health (intensive outpatient or partial hospitalization); BH other, only nonintensive behavioral health (outpatient counseling); ED, emergency department; MOUD, medication for opioid use disorder.

a The hazard ratios were adjusted for age, sex, race/ethnicity, insurance type, baseline medical (modified Elixhauser index score) and mental health comorbidities (depression, anxiety, posttraumatic stress disorder, and attention-deficit/hyperactivity disorder), evidence of overdose or infections related to intravenous drug use, and cost rank.
Medications for opioid use disorder

- Methadone: Full agonist, generates opioid-like effect
- Buprenorphine: Partial agonist, generates limited opioid-like effect
- Naltrexone: Antagonist, blocks the effect of opioids
Opioid Agonist Treatment (OAT)

- Normalizes immune and endocrine systems
- Reduces death rates/OD
Opioid Agonist Treatment

- Decreases illicit opiate use, intravenous drug use (IVDU), HIV and Hepatitis C transmission
- Increases pro-social activities, employment
- Reduces ER visits and hospitalization
- Decreases criminal activities
Crime among 491 patients before and during MMT at 6 programs

Adapted from Ball & Ross - The Effectiveness of Methadone Maintenance Treatment, 1991

Crime Days Per Year

Before TX

During TX

Adapted from Ball & Ross - The Effectiveness of Methadone Maintenance Treatment, 1991
Opioid Agonist Treatment

✧ Once stable on a dose, it rarely has to be adjusted
✧ Allows behavioral changes to be made
Methadone

- Prescribed and dispensed in an Opiate Treatment Program (OTP)

- However, in some OTPs buprenorphine is prescribed and dispensed instead of methadone
Buprenorphine

- Prescribed by medical providers in an Office Based Opioid Treatment (OBOT) program
Efficacy: Full Agonist (Methadone) Partial Agonist (Buprenorphine), Antagonist (Naloxone)
Now Simply Add Methadone

Very modified, but indebted, to Dole, Nyswander and Kreek, 1966
Methadone

- Once-a-day dosing will generally achieve relatively stable blood levels.

- Methadone reaches peak blood concentration between 2 and 4 hours after dosing.
Steady-State Simulation - Maintenance Pharmacotherapy

Attained after 4-5 half-times, 1 dose/half-life

Time (multiples of elimination half-lives)
Daily dose remains constant to steady-state

Adapted from
Goodman & Gilman

Opioid Agonist Treatment of Addiction - Payte - 1998
Methadone

- Can take up to 6 months for most individuals using heroin to stabilize and for stress hormone levels to normalize
OTPs

- Counseling
- Urine drug testing
- Daily dosing until stable
Drug testing

- Urine or saliva
- Duration of time after taking affects results
- Cut off on levels affects results
- Morphine analogues
Integrated Health System for Addictions Treatment

- HUB
  - Assessment
  - Care Coordination
  - Methadone
  - Complex Addictions Consultation

- Corrections
  - Probation & Parole

- Residential Services
- In Patient Services
- Pain Management Clinics
- Medical Homes
- Substance Abuse Out-Pt Treatment
- Nurse-Counselor Teams with prescribing MD

- Family Services

Vermont Department of Health
1. **Northwestern Hub**  
*Howard Center Chittenden Clinic*  
Chittenden, Addison & Grand Isle

2. **Farwestern Hub**  
*BAART Behavioral Health Services*  
Franklin & Grand Isle

3. **Northeastern Hub**  
*BAART Behavioral Health Services*  
Essex, Orleans & Caledonia

4. **Central Vermont Hub**  
*BAART/Central Vermont Addiction Medicine*  
Washington, Lamoille & Orange

5. **Southwestern Hub**  
*Rutland Regional Medical Center*  
Rutland & Bennington

6. **Southeastern Hub**  
*Southeast Regional Comprehensive Addictions Treatment Center (Habit OPCO & Brattleboro Retreat)*  
Windsor and Windham

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**Vermont: Population 626,562**
Opioid Treatment Programs (OTPs)

✧ What it be like for you to:
✧ Spend 1 hour to get to treatment,
✧ Then stand in line,
✧ Get a dose of medication
✧ And then get home or to work EVERY SINGLE DAY?
Retention Rates in OTPs

- Can range from 19% to 94% at 3 months
- Overall 60.7% at 12 months due to:
  - Dissatisfaction with treatment
  - Distance and travel time of >30 minutes
- Mortality rates rise with treatment dropout
Most Common Reasons for OTP Drop Out

✧ Work hours
✧ Incarceration
✧ Pressure from family, friends, or abstinence-based communities
✧ Transportation
Buprenorphine

Partial agonist used for the treatment of opiate dependence in a doctor’s office

JRB 2010
Efficacy: Full Agonist (Methadone) Partial Agonist (Buprenorphine), Antagonist (Naloxone)

Log Dose of Opioid vs % Efficacy graph showing:
- Full Agonist (Methadone)
- Partial Agonist (Buprenorphine)
- Antagonist (Naloxone)
Buprenorphine
Maintenance/Detoxification: Retention

(Kakko et al., 2003)
## Buprenorphine Detox vs. Maintenance: Mortality

<table>
<thead>
<tr>
<th></th>
<th>Detox/Placebo</th>
<th>Buprenorphine</th>
<th>Cox regression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>4/20 (20%)</td>
<td>0/20 (0%)</td>
<td>$\chi^2=5.9; p=0.015$</td>
</tr>
</tbody>
</table>

(Kakko et al., 2003)
Buprenorphine

- Buprenorphine is the opioid blocker
- Naloxone is added to reduce injection of bup
- Taken under the tongue (film) or as pill
- Injectable forms and rods as alternatives
Buprenorphine

- Ceiling effect on respiratory depression
- Long acting
- Less reinforcing
- Harrison Act of 1914 was reversed by DATA 2000
Buprenorphine

- Have to take an 8 hour training
- Needs a waiver on the DEA license in order to prescribe for opioid use disorder
- Caps apply
- 60% of all rural counties in US have NO bup provider
Naltrexone

- Full opiate antagonist
- Given in select circumstances
- Doses range 50-100 mg/day orally or
- Once a month injection (Vivitrol)
- Reducing craving for alcohol
- Side effects: depression, nausea, GI upset, HA, drowsiness, serious effects on liver
How Easy Can We Make It?

✧ Better hours
✧ Low barrier programs
✧ Same day admissions
✧ Staff trained in mental health and trauma
✧ DESTIGMATIZE to make it more welcoming for ALL
✧ Full insurance coverage
✧ HARM REDUCTION thinking
Factors

Strength of the therapeutic relationship with the provider.
What Can We Expect

### Negative Urine Drug Screens - FY21

<table>
<thead>
<tr>
<th></th>
<th>BZD</th>
<th>COC</th>
<th>OPI</th>
<th>AMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>84.93%</td>
<td>65.52%</td>
<td>84.75%</td>
<td>84.78%</td>
</tr>
<tr>
<td>Q2</td>
<td>90.71%</td>
<td>71.89%</td>
<td>71.97%</td>
<td>88.15%</td>
</tr>
</tbody>
</table>

![Graph showing negative urine drug screens for Q1 and Q2 for FY21 for BZD, COC, OPI, and AMP](image-url)
FY21 - Q2 Retention Information

- % engaged in Tx at 90 Days
- % engaged in Tx at 1 year

- July: 62.07%, 47.73%
- August: 84.21%, 56.00%
- Sept: 90.48%, 66.22%
- Oct: 65.79%, 44.83%
- Nov: 75.00%, 66.67%
- Dec: 75.00%, 29.17%
Ease of Admission -> 95% Dose on Admission

Average number of days to admission

Average of Num of days to admit Mth

- July: 0
- Aug: 0.64
- Sept: 0.51
- Oct: 0.52
- Nov: 1.53
- Dec: 0.85
What About Jails

- Does your system of incarceration support MOUD?

- What do you think happens when you send someone on methadone or buprenorphine to jail?

- What happens on release?
What Can Providers Give to Courts

✧ Treat the underlying brain changes with MOUD
✧ Help people stay in treatment
✧ Provide information on patient progress
✧ Advocate when appropriate
✧ Timely information before hearing
✧ Testimony in extreme cases
Mandated Treatment

- What is the evidence?
- What is the stage of change of the patient?
- How can we separate drug use from compliance in treatment?
No disclosures.

Content presented here represents the views of the presenter/author and do not necessarily represent the views of any other associated entity.
Outline

Why recovery?
National Recovery Study
What is the prevalence of alcohol or other drug problem resolution?
What proportion self-identify as being “in recovery”?
What are the pathways followed?
How many serious attempts does it take to resolve AOD problems?
What is quality of life and functioning like in recovery?
Outline

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- What is quality of life and functioning like in recovery?
50 years...
1970-2020
During the past 50 yrs since “War on Drugs” declared, we have moved from “Public Enemy No. 1” to “Public Health Problem No. 1”
1970: Controlled Substances Act (CSA):
Part of the larger Comprehensive Drug Abuse Prevention & Control Act of 1970, the CSA established U.S. drug control policy & created 5 schedules (classifications) of drugs to determine the legality of a substance & corresponding legal ramifications.

1986-1988: Anti-Drug Abuse Act
1st passed in 1986, & then amended in 1988, the act created the policy goal of a drug-free America, created the Office of National Drug Control Policy (ONDCP), changed the federal probation & release system from a rehabilitative to a punitive (punishment focused) model, enacted minimum mandatory sentencing for drug possession & distribution (100:1 crack/powder cocaine sentencing disparity), & prohibited controlled designer drugs.

2008: Mental Health Parity & Addiction Equity Act (MHPAEA)
Enacted in 2008, the MHPAEA closed loopholes in the Mental Health Parity Act of 1996 by requiring insurance companies to offer coverage for mental & substance use disorders that is equal to the coverage or benefits offered for other medical or surgical care (e.g. deductibles, co-pays, out-of-pocket maximums, treatment limitations).

2010: The Patient Protection & Affordable Care Act (ACA)
Healthcare legislation enacted in 2010, declared substance use disorders 1 of the 10 elements of essential health benefits in the U.S., requiring that Medicaid & all insurance plans sold on the Health Insurance Exchange provide services for addiction treatment equal to other medical procedures (closing insurance exemption gaps of the 2008 MHPAEA). Commonly referred to as the Affordable Care Act or "ObamaCare".
Laws passed in the past 50 yrs have moved from more punitive ones to public health-oriented ones.... increasing availability, accessibility and affordability of treatment.
2013 ONDCP Director Kerlikowske declares move away from “war on drugs” toward broader public health approach
Public Health Approaches to Addressing Drug-Related Crime: Drug Courts
Public Health Approaches to Law Enforcement

- Chief Campanello
  - Angel Program

“Help not Handcuffs”
National (Portugal) and State Drug Policy Positions are shifting across the US including decriminalization of possession of small amounts of all drugs (Oregon) and legalization of others (cannabis)...

Source: Canada Drug Policy Coalition
Marijuana laws in the US

- Fully illegal
- Decriminalized
- Medical
- Medical and decriminalized
- Legalized

*Washington, DC, legalized marijuana for recreational purposes, but doesn’t allow sales.

Source: Marijuana Policy Project
The “War on Drugs” rhetoric reflected a national concerted effort to reduce “supply” but also “demand” that created treatment and public health oriented federal agencies.
Paradigm Shifts
Past 50 yrs since declaration of “War on Drugs” led to large-scale federal appropriations and a number of paradigm shifts...
Genetics, Genomics, Pharmacogenetics
Neuroscience: Neural plasticity
**STAGES OF CHANGE**

**RELATED TREATMENT & RECOVERY SUPPORT SERVICES**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRECONTEMPLATIVE</strong></td>
<td>Individuals are not even thinking about changing their behavior. They do not see their addiction as a problem; they often think others who point out the problem are exaggerating.</td>
</tr>
<tr>
<td><strong>CONTEMPLATIVE</strong></td>
<td>Individuals are more aware of the personal consequences of their addiction &amp; spend time thinking about their problem. Although they are able to consider the possibility of changing, they tend to be ambivalent about it.</td>
</tr>
<tr>
<td><strong>PREPARATION</strong></td>
<td>Individuals have made a commitment to make a change. This stage involves information gathering about what they will need to change their behavior.</td>
</tr>
<tr>
<td><strong>ACTION</strong></td>
<td>Individuals believe they have the ability to change their behavior &amp; actively take steps to change their behavior.</td>
</tr>
<tr>
<td><strong>MAINTENANCE</strong></td>
<td>Individuals maintain their sobriety, successfully avoiding temptations &amp; relapse.</td>
</tr>
</tbody>
</table>

**HARM REDUCTION**
- Emergency Services (i.e. Narcan)
- Needle Exchanges
- Supervised Injection Sites

**SCREENING & FEEDBACK**
- Brief Advice
- Motivational Interventions

**SCREENING, BRIEF INTERVENTION, & REFERRAL TO TREATMENT (SBIRT)**

**CLINICAL INTERVENTION**
- Phases/Levels (e.g., inpatient, residential, outpatient)
- Intervention Types
  - Psychosocial (e.g., Cognitive Behavioral Therapy)
  - Medications: Agonists (e.g., Buprenorphine), Antagonists (Naltrexone)

**NON-CLINICAL INTERVENTION**
- Self-Management/Natural Recovery (e.g, self-help books, online resources)
- Mutual Help Organizations (e.g., Alcoholics Anonymous, SMART Recovery, Lifering Secular Recovery)
- Community Support Services (e.g., Recovery Community Centers, Recovery Ministries, Recovery Employment Assistance)

**CONTINUING CARE (3m-1 year)**
- Recovery Management Checkups, Telephone Counseling, Mobile Applications, Text Message Interventions

**RECOVERY MONITORING (1-5+ yrs)**
- Continued Recovery Management Checkups, therapy visits, Primary Care Provider Visits
What people really need is a good listening to...
“Quitting smoking is easy, I’ve done it dozens of times.”

- Mark Twain
Swift, certain, modest, consequences shape behavioral choices...
Effective Medications
Harm Reduction Strategies

- Anti-craving/anti-relapse medications ("MAT")
- Overdose reversal medications (Narcan)
- Needle exchange programs
- Heroin prescribing
- Safe Injection Facilities/Safe Consumption sites/Overdose prevention facilities
Addiction Recovery Management
Theory, Research and Practice

Humana Press
The clinical course of addiction and achievement of stable recovery can take a long time ...

Addiction Onset → Help Seeking → Full Sustained Remission → Reinstatement

4-5 years → 8 years → 5 years

Self-initiated cessation attempts → 4-5 Treatment episodes/mutual-help → Continuing care/mutual-help

Recovery Priming → Recovery Mentoring → Recovery Monitoring

can we speed this up??
Traditional addiction treatment approach: Burning building analogy

- **Putting out the fire** - good job
- **Preventing it from re-igniting** (RP) - less emphasis
- **Re-building materials** (recovery capital) – largely neglected
- **Granting “rebuilding permits”** (removing barriers) – largely neglected

New emphasis on understanding how people successfully achieve stable remission... with a focus on “recovery research”
Addiction field now experiencing another paradigm shift beyond acute care models addressing only clinical addiction pathology and towards holistic models of sustained disease, or “recovery”, management …
Outline

- Why recovery?
- National Recovery Study
- What is the prevalence of alcohol or other drug problem resolution?
- What proportion self-identify as being “in recovery”?
- What are the pathways followed?
- How many serious attempts does it take to resolve AOD problems?
- What is quality of life and functioning like in recovery?
Designed to:

- Estimate national “recovery” prevalence using nationally-representative, probability-based, sample of individuals who self-report once having a problem with AODs but no longer do…

- Uncover and discover more about chosen recovery pathways and their correlates

- Estimate number of serious quit attempts prior to problem resolution

- Investigate relationships between duration of recovery and changes in other health behaviors (e.g., smoking cessation) indices of functioning and quality of life
Using the National Recovery Survey (NRS), a cross sectional, random, nationally representative sampling frame of 39,809 was identified. Out of the 25,229 that then responded, 2,002 individuals self-identified as resolving a significant alcohol or other drug problem.

63% survey response rate, similar to other national epidemiological surveys

Data was collected in July & August of 2016

The data was weighted to accurately reflect the US population using iterative proportional fitting (raking), which produced weights based on eight geo-demographic benchmarks identified by the U.S. Census Bureau (CPS) in the 2015 Current Population Survey.
Outline

Why recovery?

National Recovery Study

What is the prevalence of alcohol or other drug problem resolution?

What proportion self-identify as being “in recovery”?

What are the pathways followed?

How many serious attempts does it take to resolve AOD problems?

What is quality of life and functioning like in recovery?
Prevalence and pathways of recovery from drug and alcohol problems in the United States population: Implications for practice, research, and policy

John F. Kelly*, Brandon Bergman†, Bettina B. Hoeppner*, Corrie Vilsaint*, William L. White

* Recovery Research Institute, Massachusetts General Hospital, 135 Martinique Street, and Harvard Medical School, Boston, MA, 02114, United States
† Child and Youth Services, W. Chevesh, Barbados, G., 27701, United States

**Article Info**

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem resolution</td>
<td>Background: Alcohol and other drug (AOD) problems extend a global,</td>
</tr>
<tr>
<td>Treatment</td>
<td>prestigious burden of disease, disability, and premature mortality. Even</td>
</tr>
<tr>
<td>Assisted</td>
<td>so, little is known regarding how, and by what means, individuals</td>
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<tr>
<td>Uncovred</td>
<td>successfully recover AOD problems. International knowledge would inform</td>
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<tr>
<td>Preventee</td>
<td>policy and guide service provision.</td>
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<tr>
<td>Adults</td>
<td>Method: Probability-based survey of US adult population estimating: 1)</td>
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<tr>
<td>Population</td>
<td>AOD problem resolution prevalence; 2) lifetime use of “unassisted” (i.e.,</td>
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<td></td>
<td>treatment/medication, recovery services/unaided) vs. “assisted” (treatment</td>
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<tr>
<td></td>
<td>pathways); 3) correlates of assisted pathway use. Participants (43.4% of</td>
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<td>11,808) responding “yes” to, “Did you use to have a problem with alcohol</td>
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<td>or drugs but no longer do?” assessed on substance use, clinical history,</td>
</tr>
<tr>
<td></td>
<td>problem resolution.</td>
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<tr>
<td>Recovered</td>
<td>Results: Weighted prevalence of problem resolution was 9.4%, with 46%</td>
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<td></td>
<td>self-identifying as “in recovery”, 53.9% reported “assisted” pathway use.</td>
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<td>Most utilized support was mutual-help (43.1%5E = 1.6), followed by</td>
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<td></td>
<td>treatment (27.6%5E = 1.4), and emerging recovery support services (21.9%</td>
</tr>
<tr>
<td></td>
<td>5E = 1.8), including recovery community centers (6.2%5E = 5.9). Strongest</td>
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<td></td>
<td>correlates of “assisted” pathway use were lifetime AOD diagnosis (AOR</td>
</tr>
<tr>
<td></td>
<td>= 10.8[7.42-15.74], model R2 = 0.13); drug court involvement (AOR =</td>
</tr>
<tr>
<td></td>
<td>8.1[5.2-12.6], model R2 = 0.10); and, inversely, absence of lifetime</td>
</tr>
<tr>
<td></td>
<td>psychiatric diagnosis (AOR = 0.39[0.2-0.3], model R2 = 0.10).</td>
</tr>
<tr>
<td></td>
<td>Compared to those with primary alcohol problems, those with primary</td>
</tr>
<tr>
<td></td>
<td>cannabis problems were less likely (AOR = 0.7[0.5-0.9]) and those with</td>
</tr>
<tr>
<td></td>
<td>opioid problems were more likely (AOR = 2.2[1.4-3.4]) to use assisted</td>
</tr>
<tr>
<td></td>
<td>pathways. Indices related to severity were related to assisted pathways</td>
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<td>(R2 &lt; 0.03).</td>
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<td>Conclusions: Tens of millions of Americans have successfully resolved an</td>
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<td>AOD problem using a variety of traditional and non-traditional means.</td>
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<td>Findings suggest a need for a broadening of the menu of self-change and</td>
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<td>community-based options that can facilitate and support long-term AOD</td>
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<td>problem resolution.</td>
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RESULTS

9.1% or 22.35 million Americans have resolved an alcohol or other drug problem.
The primary substances of use are:

- Alcohol: 59%
- Cannabis: 13%
- Cocaine: 11%
- Methamphetamine: 8%
- Opioids: 6%
- Other: 3%

Kelly et al, 2017, Drug and Alcohol Dependence
Outline

Why recovery?

National Recovery Study

What is the prevalence of alcohol or other drug problem resolution?

What proportion self-identify as being “in recovery”?

What are the pathways followed?

How many serious attempts does it take to resolve AOD problems?

What is quality of life and functioning like in recovery?
On Being “In Recovery”: A National Study of Prevalence and Correlates of Adopting or Not Adopting a Recovery Identity Among Individuals Resolving Drug and Alcohol Problems

John F. Kelly, Alexandra W. Abry, Connor M. Milligan, Brandon G. Bergman, and Bettina B. Hoeppner
Massachusetts General Hospital, Boston, Massachusetts

The concept of recovery has become an organizing paradigm in the addiction field globally. Although a convenient label to describe the broad phenomena of change when individuals resolve significant alcohol or other drug (AOD) problems, little is known regarding the prevalence and correlates of adopting such an identity. Greater knowledge would inform clinical, public health, and policy communication efforts. We conducted a cross-sectional nationally representative survey (N = 39,899) of individuals resolving a significant AOD problem (n = 1,095). Weighted analyses estimated prevalence and tested correlates of label adoption. Qualitative analyses summarized reasons for prior recovery identity adoption/non-adoption. The proportion of individuals currently identifying as being in recovery was 45.1%, never in recovery 39.5%, and no longer in recovery 15.4%. Predictors of identifying as being in recovery included formal treatment and mutual-help participation, and history of being diagnosed with AOD or other psychiatric disorders. Qualitative analyses regarding reasons for not prior recovery identity found themes related to low AOD problem severity, viewing the problem as resolved, or having little difficulty of stopping. Despite increasing use of the recovery label and concept, many resolving AOD problems do not identify in this manner. These appear to be individuals who have not engaged with the formal or informal treatment systems. To attract, engage, and accommodate this large number of individuals who add considerably to the AOD-related global burden of disease, AOD public health communication efforts may need to consider additional concepts and terminology beyond recovery (e.g., “problem resolution”) to meet a broader range of preferences, perspectives and experiences.

Keywords: recovery, addiction, identity, social, remission
Proportion self-identify as being “in recovery”

- Odds of self-identifying in this manner associated with greater indices of greater severity (earlier age of onset, psychiatric comorbidities, greater treatment and recovery support services use)

Kelly et al, 2018, Psychology of Addictive Behaviors
Outline

Why long-term remission/recovery important?
National Recovery Study

What is the prevalence of alcohol or other drug problem resolution?
What proportion self-identify as being “in recovery”?

What are the pathways followed?

How many serious attempts does it take to resolve AOD problems?

What is quality of life and functioning like in recovery?
Acknowledges myriad ways in which individuals can recover:

- **Clinical pathways** (provided by a clinician or other medical professional – both medication and psychosocial interventions)

- **Non-clinical pathways** (services not involving clinicians like AA)

- **Self-management pathways** (recovery change processes that involve no formal services, sometimes referred to as “natural recovery”).
Recovery Pathways: Assisted vs Unassisted

Assisted 54%

Unassisted 46%

Kelly et al, 2017, Drug and Alcohol Dependence
Assisted Pathway: Services Used

- Formal Treatment: 27%
- Mutual-Help: 43%
- Medications: 9%
- Recovery Support Services: 21%

Kelly et al, 2017, Drug and Alcohol Dependence
...broad array of support services utilized...
Alcoholics Anonymous and other 12-step programs for alcohol use disorder (Review)

Kelly, JF, Humphreys, K, Ferri, M

Kelly, JF, Humphreys, K, Ferri, M.
Alcoholics Anonymous and other 12-step programs for alcohol use disorder.
Cochrane Database of Systematic Reviews 2020; Issue 3, Art. No.: CD012880.
DOI: 10.1002/14651858.CD012880.pub3

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Cochrane Systematic Review on AA/TSF (2020)

✧ Kelly, JF
✧ Humphreys, K
✧ Ferri, M
TSF Compared to Different Theoretical Orientation Treatments (RCTs all Manualized)

Kelly et al, 2020, Cochrane Database Sys Rev
Compared to CBT-treated patients, 12-step treated patients more likely to be abstinent, at a $8,000 lower cost per pt over 2 yrs (potential $15 billion total savings for AUD patients nationally).

Also, higher remission rates, means decreased disease and deaths, increased quality of life for sufferers and their families.
Empirically-supported MOBCs through which AA confers benefit

Adapted from: Kelly, 2017; Kelly, Magill, Stout, 2009
Proportion Reporting Alcohol/Drug Problem Resolution and Complete Abstinence from Alcohol/Drugs at Time of Survey (NRS)

- Total Abstinence at time of survey
- Still using primary/secondary substance

Proportion Reporting Alcohol/Drug Problem Resolution and Use Status Since Problem Resolution

- Completely continuously abstinent since problem resolution
- Some use of some substance at some point since problem resolution
- Some substance use at time of survey

Kelly et al, 2017, Drug and Alc Dep; Eddie et al, under review
Of all those reporting problem resolution at the time of the survey only 20% reported complete abstinence from all AOD since resolving their problem, and an additional 34% reporting some use of a substance since resolving their problem.

However, a more abstinent resolution status was associated independently with better functioning, well-being, and lower psychological distress, despite having more severe clinical histories prior to resolving their problem.

Suggests while many report having resolved a significant AOD problem, use persists for some and greater use of secondary/primary substances over time is related to poorer functioning and well-being... but longer problem resolution was associated with abstinent status suggesting that people tend to discontinue use over time...

Cross-sectional nature of this study cannot speak to directionality of effects but other studies support the notion that abstinence remission is more stable remission and associated with better functioning...
REMISSION FROM ALCOHOL DEPENDENCE: National Epidemiologic Survey on Alcohol and Related Conditions

STUDY DESIGN: Cross-sectional, nationally-representative sample

PARTICIPANTS: Of the N=2,109 U.S. adults who were in full remission from prior DSM-IV alcohol dependence in the year preceding the Wave 1 interview, N=1,772 participants were reinterviewed in Wave 2

AIMS WERE TO DETERMINE:
• Remission type
• Rate of relapse
• Risk of relapse compared to duration of remission

MEASURES INCLUDE:
• DSM-IV alcohol use and dependence
• Recovery status
• Relapse
• Covariates (e.g., age, gender, race/ethnicity, etc.)

This study assessed the risk of relapse among U.S. adults who reported at least 1 full year of remission from alcohol dependence

## Table 1. Percentage distribution by Wave 2 past-year recovery status, according to type of remission at baseline

<table>
<thead>
<tr>
<th>Baseline recovery status</th>
<th>No. of cases</th>
<th>Wave 2 past-year recovery status</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Dependent</td>
</tr>
<tr>
<td>Asymptomatic risk drinker</td>
<td>431</td>
<td>6.0 (1.1)</td>
</tr>
<tr>
<td>Low-risk drinker</td>
<td>645</td>
<td>2.9 (0.6)</td>
</tr>
<tr>
<td>Abstainer</td>
<td>696</td>
<td>2.1 (0.6)</td>
</tr>
</tbody>
</table>

Recovery status at Wave 2 varied strongly as a function of remission type, with baseline abstainers being the most stable category.

Asymptomatic risk drinkers were just as likely to develop AUD symptoms (34%) as they were to remain asymptomatic (31%).

48% of baseline low-risk drinkers remained in the same category, while 18% became abstainers and 19% developed dependency.

Baseline abstainers were the most stable category, with 77% remaining abstinent.
Outline

Why long-term remission/recovery important?

National Recovery Study

What is the prevalence of alcohol or other drug problem resolution?

What proportion self-identify as being “in recovery”?

What are the pathways followed?

How many serious attempts does it take to resolve AOD problems?

What is quality of life and functioning like in recovery?
Frequency Distribution of Serious Recovery Attempts Prior to Successful Resolution
(LEFT: Full sample  RIGHT PANEL: Outliers removed)

Kelly et al, 2019, Alc Clin Exp Res
Frequency Distribution of Serious Recovery Attempts Prior to Successful Resolution
(LEFT: Full sample  RIGHT PANEL: Outliers removed)

Skewness=5.89, SE=0.57; Kurtosis=50.27, SE=9.66
Frequency Distribution of Serious Recovery Attempts Prior to Successful Resolution
(LEFT: Full sample  RIGHT PANEL: Outliers removed)

<table>
<thead>
<tr>
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<th>Mean</th>
<th>Median</th>
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<tr>
<td><strong>Full Sample</strong></td>
<td>5.35 (13.41)</td>
<td>2 (1, 4)</td>
</tr>
</tbody>
</table>

Kelly et al, 2019, Alc Clin Exp Res
Median Recovery Attempts by Primary Drug

Kelly et al, 2019, Alc Clin Exp Res
Number of Recovery Attempts by Clinical and Recovery Support Services Use

Kelly et al, 2019, Alc Clin Exp Res
Outline

Why long-term remission/recovery important?

National Recovery Study

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What proportion self-identify as being “in recovery”?

What are the pathways followed?

How many serious attempts does it take to resolve AOD problems?

What is quality of life and functioning like in recovery?
Beyond Abstinence: Changes in Indices of Quality of Life with Time in Recovery in a Nationally Representative Sample of U.S. Adults

John F. Kelly, M. Claire Greene, and Brandon G. Bergman

Background: Alcohol and other drug (AOD) treatment and recovery research typically have focused narrowly on changes in alcohol drug use (e.g., “percent days abstinent”) with little attention on changes in functioning or well-being. Furthermore, little is known about whether and when such changes may occur, and for whom, as people progress in recovery. Greater knowledge would improve understanding of recovery processes and points of vulnerability and growth.

Methods: A large, probability-based, cross-sectional sample of U.S. adults who screened positive to the question, “Did you use to have a problem with alcohol or drugs but no longer do?” (Screening = 64.9%, from 2010; unweighted sample n = 2,993). Linear, spline, and quadratic regressions tested relationships between time in recovery and 5 indicators of well-being: quality of life, happiness, self-esteem, recovery capital, and psychological distress, over 7 temporal horizons: the first 40 years and the first 5 years, after resolving an AOD problem and tested moderators (sex, race, primary substance of use). Locus of Control: Scaleplot smoothing regression was used to explore turning points.

Results: In general, in the 40-year horizon there were initially steep increases in all measures of well-being (and steep drops in distress), during the first 6 years, followed by shallower increases. In the 5-year horizon, significant gains in self-esteem and happiness were observed initially during the first year followed by increases. Moderator analyses examining primary substance found that compared to alcohol and cannabis users, those with opioid or other drug (e.g., stimulants) had substantially lower recovery capital in the early years; mixed race/ethnic Americans tended to exhibit poorer well-being compared to White people, and women consistently reported lower indices of well-being over time compared to men.

Conclusions: Recovery from AOD problems is associated with dynamic non-linear improvements in indices of well-being. Further research is needed to understand the nature of the changes that occur over time and for whom, as people progress in recovery.

Key Words: Recovery, Régression, Alcohol Use Disorder, Quality of Life, National, Epidepidemiology.
Recovery Indices by Years Since Problem Resolution

Kelly et al, 2018, Alc Clin Exp Res
Significant Change
in Slope
5-6 yrs

Kelly et al, 2018, Alc Clin Exp Res
Kelly et al, 2018, Alc Clin Exp Res
Recovery Indices by Years Since Problem Resolution

Kelly et al, 2018, Alc Clin Exp Res
Fig. 5. Locally Weighted Scatterplot Smoothing (LOWESS) analysis of recovery indices by years since problem resolution stratified by primary substance.
9.1% or 22.35 Million Americans resolved sig. AOD prob.

Only about half self-identify as “in recovery” – those with less severe histories; similar crises but greater ability to stop sans help.

Approximately half resolve these problems without any external assistance - about half have non-abstinent problem resolution both are related to less severity/complexity.

Mean problem resolution attempts is around 5.5 but this number heavily skewed; Mdn number = 2; with high variability around estimates.

QOL indices monotonic improvements over time, with steeper increases first 5 years, then ongoing, shallower improvement; post “pink cloud” drop early; opioid/stimulant tougher time early on.
**Implications**

**RESEARCH AND POLITICAL ADVOCACY:** Estimates here similar to prior national/regional, non probability-based estimates suggesting approximately 9.1% (20-25M) of adult Americans “in recovery”. Could learn more from this large, diverse, group; mobilize for change?

**PUBLIC HEALTH & POLICY COMMUNICATION:** “Recovery” term used in past estimates, but only half identify as “in recovery”. Label adoption may serve adaptive funx; qualitative analyses suggest many resolving AOD may not relate and/or oppose this term; thus to engage more people public health and policy communication efforts might include “problem resolution” in addition to “recovery”.

**HOW TO REACH MANY NOT SEEKING SERVICES, LESSEN IMPACT:** In keeping with other studies, half resolved problem without help; also about half with non-abstinent resolution – those with lower severity and higher recovery capital. Possible to resolve significant problems without abstinence but abstinence is correlated with high funx and most are heading toward abstinent resolution with more time in recovery...

**RECOVERY NEEDS DYNAMIC, VARY BY SUBGROUP:** QOL changes suggest “pink cloud” phase end may create early challenge; 1-yr things looking rosier; continue to improve; marginalized opioid/meth groups need recovery capital/support early on. RSSs?

**REASONS FOR OPTIMISM:** Prior estimates of recovery attempts, may be “mean” averages, biased upwards (skewed); while reflective of high variability, medians should be used. These low in non-clinical (Mdn=1) higher in clinical (Mdn=3) samples (overall = 2 serious attempts prior to resolution; Mean=5.6; SD=13.41). Hopeful. RCCs and other novel RSS may enhance access to recovery capital; increase odds of sooner remission
Recovery Research Institute

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RECOVERY RESEARCH INSTITUTE
Working with communities to address the opioid crisis.

- SAMHSA’s State Targeted Response Technical Assistance (STR-TA) and State Opioid Response Technical Assistance (SOR-TA) grants created the Opioid Response Network to assist states, individuals and other organizations by providing the resources and technical assistance they need locally to address the opioid crisis.
- Technical assistance is available to support the evidence-based prevention, treatment, and recovery of opioid use disorders.

Funding for this initiative was made possible (in part) by grant 1H79TI083343 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.
Working with communities to address the opioid crisis.

- The Opioid Response Network (ORN) provides local, experienced consultants in prevention, treatment and recovery to communities and organizations to help address this opioid crisis.
- The ORN accepts requests for education and training.
- Each state/territory has a designated team, led by a regional Technology Transfer Specialist (TTS), who is an expert in implementing evidence-based practices.
Contact the Opioid Response Network

❖ To ask questions or submit a request for technical assistance:

- Visit www.OpioidResponseNetwork.org
- Email orn@aaap.org
- Call 401-270-5900
Upcoming Webinars

Session will begin at 3:00 pm

SUMMER SESSION
Closed Question Forums By State
State-specific registration links and information will be announced.

More information to come.

www.ncsc.org/nerjoi